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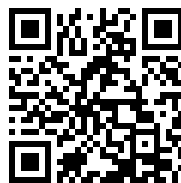
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# THE INNER WORLD.

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## *A NEW THEORY*

SETTING FORTH THAT THE EARTH IS A HOLLOW SPHERE CONTAIN-  
ING AN INTERNAL HABITABLE AND INHABITED REGION.

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By FREDERICK CULMER, SR.

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SALT LAKE CITY, UTAH.  
1886.





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## CHAPTER I.

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### THE UNIVERSAL VACUITY OF CENTRES.

In presenting to the world some new ideas regarding the earth on which we live, it will not be improper to briefly summarize such information we possess as bears on the foundation of my theories. In so doing, I merely gather facts well demonstrated by scientists and generally accepted at this date as truths.

Matter exists in the form of ultimate molecules; that is to say, when matter is subdivided to the last degree, the final particles are called molecules.

When the forms of matter with which we are familiar are separated one kind from another, until a kind is found from which no other kind can be separated, it is called an element or entity. Each of the metals is an entity, other entities are salts, others gases. There are only about sixty-five elements of which the whole world is composed.

Whether each element is composed of molecules of a different shape to those of each other element is not known.

Each particle of matter is charged with two primary forces, attraction and repulsion, which not only act, in opposition, in the molecule itself but the forces belonging to that molecule influence every other molecule to a degree established by known laws.

The above containing sufficient known facts for me to commence the structure of my theories, I must warn the reader that what follows is not all orthodox; but in the development of my own ideas is necessarily associated with facts more or less accepted by scientists.

Attractive force exists in superabundance in the densist elements, and repulsive force in superabundance in the most volatile elements. Attraction condenses towards centres, aiming at absolute solidity at that point; repulsion, its opposite, radiates from centres, aiming at absolute vacuity there. The greatest density, therefore, cannot exist at the real centre of a mass, but in a globular outline approaching the centre in exact proportion to the specific gravity of the element of which it is composed. Under the influence of attraction, a mass assumes the form of a sphere, all its molecules pressing towards its centre. The density of a given object on the earth's surface increases as it is taken from the highest to the lowest altitudes, giving rise to the idea that at the centre of the earth it would reach its

maximum weight, but there, the attraction, being counterbalanced in all directions, would obviously be *nil*.

It is well known that attraction and repulsion together not only play upon and between molecules, but upon and between masses, and is a principle that extends to the largest aggregations of matter, the planets, the solar system, the universe. In its terrestrial magnitude, therefore, attraction, drawing to centres, establishes the circumference of matter, while repulsion, driving matter from centre to circumference, makes of our Earth a hollow globe. The densist of matter, gold or platinum, scarcely compressible, in all probability consists of spherical molecules in which attraction has such overwhelming power and repulsion so little that there is hardly any internal space. It is the nature of each element to possess its own degree of attractive and repulsive force in proportion to its density—the heavy metals being charged with attraction and the gases with repulsion in the greatest degree. Thus hydrogen gas, on being freed, is the most expansive of all elements, and its molecules assume great spheres (like the soap bubbles blown by children) of which the shell is the entity—the matter—surcharged from the centre by repulsive force, and the interior of the globe is absolute space, emptiness, nothing.

But while the proportionate powers of attractive and repulsive forces vary in each element according to its density, no kind of matter exists without a supply of both forces—thus gold molecules have an internal space, however small, and hydrogen molecules are retained in their spherical shape by attraction. I also hold that the centre of gravity of iridium, the heaviest of metals, would be in a globular outline very near its centre, while that of hydrogen would be in a similarly shaped outline very near its circumference.

The forces of attraction and repulsion having been admitted to attain to terrestrial and cosmical proportions, though that of repulsion only recently so admitted, it may easily be thought out that the matter on which they act should assume the same forms in its greatest masses as in its smallest. The form of the solar system is that of a hollow globe in which the sun and the planets form a material circumference and the centre is absolute space. The sun is away from the centre in the proportion of its mass to the remainder of its system. The accumulated repulsive force belonging to the solar system as a mass keeps even the sun from the centre. Sun spots seem to reveal that our luminary itself is a hollow globe whose gaseous circumference is sometimes rent to show the space that is within; and so far as daring astronomers have been able to demonstrate, the universe is a hollow globe of which the Milky Way is the circumference and the nearest sun to the centre is Alcione,

which, however, is not in the geometric centre, but in one of the foci of a stupendous ellipse.

Are we, then, to pursue this theory from infinitesimal proportions to those of the infinite, finding centres to be void of matter, whether they be in a molecule or in the universe, and not think seriously that our own earth, intermediate between the two extremes, may also be a hollow sphere?

Sir Isaac Newton formulated the axiom that, "To every action there always is opposed an equal reaction, or, the mutual actions of two bodies upon each other are always equal, and directed to contrary parts." This is manifested by the obvious fact that the meeting of two bodies create a rebound whose combined power is exactly equal to the impact. Thus, if a cannon ball is thrown against the side of an ironclad, the vessel immediately responds to the blow by a push in the contrary direction which, distributed throughout its entire framework, is exactly equal in power to that of the blow which it received. It is conceded that the effect of two such opposing forces is always shown at right angles to the direction of the forces, as "when brittle substances strike and break, their fragments fly at right angles to the lines of the projectile force." Baron von Humboldt, the great German traveller and philosopher, looked upon the powers that produce earthquakes and volcanic eruptions as "the reaction of the interior upon the exterior of the planet." This is only another term to express the idea of the repulsive force of the Earth's mass, emanating from the interior, opposing itself to the whole attractive force striking towards the centre. Now these two forces cannot exist without the matter upon which they play arraying itself at right angles to the radiating lines of force, and the sum of these right angles must necessarily form a hollow globe. As science has long admitted each molecule to possess both forces, I see no controverting the proposition that every molecule must be of that description. And as recent scientific development has shown clearly that the two forces operate in the largest as well as the smallest aspects, expanding into terrestrial and cosmical functions, it is equally clear to me that the planets and suns must also be hollow globes.

That this idea has never before been suggested is owing to two reasons. One that hitherto all considerations of gravity centres have been viewed from the *exterior* of the mass, where the globular outline of greatest density, above referred to, would manifest itself as accruing to the geometric centre. The other that the universal existence of repulsive force has only recently been put forth in undeniable shape. From these two reasons, a third one obtains, that until now there has arisen no incentive for the thought. But

to me, who am going *volens volens* into the inside of the world itself, it is an idea of paramount importance.

Once accepted by any thinking person, even as a hypothesis, the theory above advanced will receive constant verification in all the varied phenomena of physics. If the reader can find any physical condition of things to controvert the idea, he will have accomplished something beyond my power and I would thank him to communicate the facts to me.

A glass blower secures a lump of "metal" on the end of his blow pipe, maintaining its spherical form by a rotatory movement in which he has the benefit of cohesive attraction in the lump itself and makes use of the attraction of gravitation as a borrowed auxiliary. The fact that the mass is now mobile proves that the lump also possesses inherent repulsion in its particles—that they are separate and free to move one upon the other. Having the inherent attraction creating the sphere and the inherent repulsion causing mobility, and borrowing gravity during rotation to secure poise, he then supplies a repulsive force exerted from the interior of the lump by blowing into the pipe and at once creates an *interior concave surface*. Not only this, but, though the pipe may be inserted only into the edge of the lump, the first movement of the interior cavity is to *strike for the centre* of the mass, whence it expands to the circumference equally in all directions, proving that even this artificial repulsive force, once introduced, searches for the centre from which to exert its power.

If a bladder were filled with some element which had special attraction for some other gaseous element, the latter would gather around the entire bladder in an outside coating, exhibiting the spherical form and convex outer surface which attraction ever produces. On the other hand, if the bladder contained a gas desirous of expansion, the repulsive force emanating from the centre of the bladder would coat its inside, exhibiting the convex interior surface of a sphere, a production which repulsive force seems to aim at. This arrangement of the molecules is by virtue of the aggregated forces belonging to the mass, an endowment additional to the individual forces belonging to the molecule—additional just as each particle of matter attracts every other particle besides each mass attracting every other mass.

When iron is taken in a highly heated state from a forge, or in a molten condition from a blast furnace, the two primary forces are in such intense play that repulsion, in moments of its supremacy, flings out miniature iron worlds that fall—a shower of sparks—in curved lines to the earth, which latter, alas, interposes its influence to prevent the completion of the orbital revolution of the body cast around the miniature sun which flung it forth. Surrounded, as we always are,



by the overwhelming influence of the earth's attractive force, it would be difficult to select another phenomenon so familiar as this and yet so illustrative of the manner in which matter, from being fused into expansion that is almost gaseous, condenses into a solid during its course and before it has had time to come in contact with any solid resistance. An examination of these particles will show that during their brief flight they yet had time to assume spherical forms by virtue of their inherent attraction. But it will be seen that the contrary force of repulsion has also been at work and radiating from the centre by its inevitable law *has made each one of them hollow*. The internal cavity averages from one-half to three-fifths of the whole diameter of the sphere.

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## CHAPTER II.

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### THE POLAR ORIFICES OF THE EARTH.

After many years of travel and adventure throughout the world, and having often meditated upon Arctic voyages since my early days, trying to find out, at least to my own satisfaction, why, time after time, they should prove such terrible disasters, I conclude that there are in the voyages of discovery in those regions, some causes of their failure that have not yet been explained. It seeming impossible from past experience, for man to overcome by his ingenuity or his bravery the obstacles to finding a Northwest passage round America, or to reaching the 90th degree of North latitude called the pole, I am suggested the task of jotting down some thoughts which may be of use to geographical science. These ideas, based upon authentic scraps of history, and observations made by me from the time I was a stripling until now, may prove to be something worthy of investigation.

I do not believe there is any use in future explorations to discover either a Northwest passage or the 90th degree of North or South latitude. I will endeavor to explain from my standpoint, which at present may seem to be ridiculous enough, my reasons for this opinion, though I well know them to be at variance with accepted theories; and having long since given up my roving on the ocean, I have calmly considered here beyond the bustle and whirl of active life, the causes of certain effects bearing on this subject; and in order

to convey the workings of my mind in the most intelligent manner, I shall have to bring in matters which may not, at first, appear relevant.

We will first consider the unsuccessful attempts to gain the 90th degree of latitude, in which service so many brave and useful men have been lost, while others have suffered terrible privations from cold and hunger, besides the vast amount of loss in ships and their equipments in order to discover that which I positively declare does not exist. And I am about to explain the reason why. Although I may startle some with my theory, yet I humbly but positively assure mankind that this earth—a hollow sphere—has an opening at each pole of about one thousand miles in diameter, to admit light and heat from the sun, to radiate throughout the inner world by direct, refracted and reflected rays, diurnally, annually and seasonably; that the inner world has everything necessary for the requirements of the animal and vegetable creation, that no material difference exists between that and the outer world except what may be caused by the surface of one being concave and the other convex; that rivers run and oceans roll, land and water existing there as here; atmosphere, also, with its attendant phenomena there, as here, comfort and sustain man and beast.

I am well aware that among the masses of intelligent men in this age, such an assertion as this will be looked upon by some as the effect of a disordered brain; but there are others who will view it in the same light that I do, viz: one of the many remarkable truths not yet demonstrated connected with this world on which we live. I do not declare this as a discovery; I write it as a theory, and will do all I can to make it plain, that my ideas may be understood by my fellow man, meanwhile asking forbearance in judgment until I have drawn upon my last resource for proof that such a wonderful and valuable truth can exist in this age unknown to men. It is not very long ago in its history that the world was considered to be an extended plain supported on something else as a table might do on the floor.\* But a complete revolution took place when the wonderful discovery was made, or the theory promulgated, that this world instead of being flat and stationary with the sun and moon revolving around it and merely serving the purpose of lighting it by day and night as attendants, was in reality a globe and of itself revolved through space with even regularity around the sun and also rotated on its own axis. We know how the theory was attacked by the learned

\* Upon this principle Mercator drew his charts for navigating the world. Man's understanding of the shape of the Earth was very limited even five hundred years ago. Indeed, in my young seafaring days I was compelled to work with Mercator's charts, and learned the art of navigation by Gunter's scale upon the extended plain principle.

men of the day; in fact, all men knew it to be false, and the theorist came near paying for his temerity with his life. The inquisitors compelled him to recant; yet he secretly added, "The world does move for all that." So I, constrained by public opinion may be driven for a moment to admit that the earth is solid, but I shall probably cling to the mental reservation that "the globe is hollow for all that." Galileo's experience was not by any means an unusual thing in that age. The man who dared to know more than his fellows fared hard, and although by research he may have proven his theories to be true, the proof was not generally found out until after his execution. But we can well understand to-day that the earth is a globe and does rotate; it has repeatedly been demonstrated beyond the possibility of a doubt, and if a man should now advance the extended plain principle he would be looked upon as a lunatic. Having accepted this truth because it had been proven, how could man be reconciled at a later date to the wonderful discovery that it was flattened at the poles? The apparent flattening at the poles as shown in the shadow of the earth on the moon is due to the openings into the interior of the earth, and it is curious enough that no learned man has been able to draw upon his imagination for such a conception. We have all read that accident has led to the discovery of many remarkable truths—such as the law of gravitation through an apple falling from a tree. A trivial occurrence would set a man thinking until he was led to a theory perhaps at the time difficult to believe, but later it would be demonstrated and afterwards accepted by all mankind as the truth.

In the case of this, my theory, I have no chance to prove it to be true, unless, in the future, man succeeds in penetrating beyond the icy barrier of the North into a more congenial climate—not further North but more into the interior of the earth, through the opening, than Capt. Hall or any other explorers have reached. I read with great interest the reports of late explorations to the North, and thirst for knowledge of the personal experiences of those who have gone farthest; not that I would advise any one to risk his life and happiness in that most uninviting clime; my belief is that no man will be able to plant the standard of his country on any land in that region worth one dime to himself or any one else at present, because, as I proceed, I am more than ever convinced that the time is not yet come when the great secrets of the ice-bound regions of the North or South shall be unlocked.

Regarding the Aurora Borealis, I contend it is the sun's rays shining on a placid interior ocean and reflecting upon the outer atmosphere. It is seen far North because the observer is very near to the orifice through which it comes. The "Merry Dancers", seen

outside of the frigid zone, is the reflection of the Aurora Borealis on the atmosphere of the temperate zone. I have seen the reflection of the Aurora from the hills of Scotland, the Orkneys and Hudson's Bay, but have never seen the arc of the Aurora because I have not been far enough North; but the reflection can be seen far in the temperate zone. Now when intelligence of a most unusual and wonderful nature comes rushing to my mind, the Aurora seems to be nothing extraordinary; indeed, it would seem more remarkable if there were no light, because then my theory would not have this important witness to support it. I maintain that the position of the earth during the Arctic winter (when all is dark there but for this reflected light) admits the direct rays of the sun through the Southern orifice, and his direct, refracted, and reflected light shines through the Northern orifice, and reflected on the atmosphere of the Arctic zone presents the arc of light described. And now in reference to my idea that Capt. Hall, by gaining the latitude he did, approached it, indeed, he did not enter the great gateway leading to the inner world. In describing, as well as he could, his surroundings, and turning back, as he did, when everything was in his favor for prosecuting his journey North,—for which purpose he was commissioned with a well victualled ship and a healthy crew, who gave no evidence of having suffered much compared with others who had been nearly as far but met with greater mishaps,—might cause some of the much interested men of the world to think he was a coward. Yet I do not think so by any means, and will try to explain my reason, and in so doing add support to my theory. When Capt. Hall had proceeded in a Northerly direction beyond the eighty-second degree of North latitude, he was surrounded with a circle of circumstances which he could not understand, and in such a position I can defy the bravest man who ever lived to overcome the desire to return to that security with which he was acquainted rather than remain in a position beyond his comprehension. I will here describe what he and his companions realized in the shape, position and geographical deleniation of their surroundings. If they were on the water, their horizon would appear so near when looking forward or back, Northward or Southward, that it would consist of the slight ripples of water in their immediate vicinity; while on looking Eastward or Westward there would be no horizon, but objects would appear as far as the range of vision could extend. Their boats, if they were in boats, or ship, if they were in their ship, would appear to be at the top of a ridge upon the water, as if they were riding across the crest of a gigantic wave. Their instruments, adapted for use on the exterior of the globe, would become unintelligible, and fear would take possession of the bravest men under such circum-

stances. Therefore, I place no blame, or brand of cowardice, upon a fellow man under such conditions. But it appears that Capt. Hall himself declared afterwards that had he studied the rejected theory of Capt. Symmes, (hereafter given) he would have pursued his journey, being then only six hundred miles from the place described by him as the entrance to the unknown world. While if proceeding North by land there would not appear to one's sense of equilibrium any material difference to that in the temperate zone, the gravity might slightly exceed, but not sensibly, that of the latitude of Canada. The hills and mountains or plains and valleys would not be likely to cause any astonishment to the traveller, although objects North or South would be likely to abruptly terminate, while those East and West would, as on the water, vanish in the level distance. Continuing, however, on this line of travel, the climate would sensibly change. Having entered the orifice, and travelling on a concave surface, the heat would increase rapidly and vegetation luxuriantly abound. The habitations of an ancient race of humans would soon appear, and on the ocean their shipping would soon be seen to dot the surface. Had Capt. Symmes' theory been investigated, I have no doubt that, ere this date, some proof would have been found to substantiate his idea; but it did not comprehend an inner world,—merely a basin heated and warmed by the refracted rays of the sun, where fruits and flowers grow and herds of animals recuperate from the effects upon their system of a sojourn for a time in the Arctic regions.

My theory extends beyond the basin, as one proof of which I offer the Aurora Borealis, and in describing the cause of this important witness I also describe measurably the geographical delineation of the inner world. I say "there rivers run," consequently there oceans roll; one cannot exist without the other. The ocean rivers distribute for the benefit of all animal and vegetable life, within and without the globe, the necessary changes of climate for vegetation, and they are ever caused in their action by the daily rotation of the earth, the heated waters of the tropics being distributed by that motion to the frigid circles, and as a steam heater returning and mixing the warm and cold, producing storms and waterspouts, whose moisture, being driven by the winds over all the lands, supply the earth with rains, &c. The diurnal rotation causing ocean streams on the inner as well as the outer world enables every part to receive in its turn the genial warmth and light from the sun direct refracted and reflected, and distributed by the motion of the earth, to every portion, with no exception beyond that needed for seasonable relaxation. Thus, in the inner world, the days and nights, seed time and harvest, summer and winter, occur. I maintain that the crust of the earth is

about one thousand miles in thickness, thus leaving six thousand miles diameter at the interior equator, which would cause the sky overhead to be as clear as ours, as the opposite side or antipodes cannot be seen any more than we can see ours. The atmosphere is the same as our own; is, indeed, a part of it. The openings are about one thousand miles across, admitting light and heat from the sun in due season. These large orifices produce the flattened appearance which the shadow of the earth upon the moon during an eclipse presents to the observer, and which has caused so many contradictory ideas to be promulgated; and I call upon this appearance of the earth's shape as another important witness to substantiate my theory.

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### CHAPTER III.

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#### THE ALLEGED NORTH-WEST PASSAGE AND SYMMES' HOLE.

I further maintain that there is no water passage to the inner world on the North of America, the evidence of Arctic history notwithstanding. That this is true, I shall endeavor to prove by explaining the natural and only cause of the Gulf Stream, an ocean river well known to mariners on the Atlantic; and while giving this explanation, it will of course be understood that the same cause produces the same effect the world over, so that in explaining the Gulf Stream all other ocean rivers can be included, their whirls and courses and counter-courses, which, as far as I have read or heard, have never yet been satisfactorily accounted for.

The vast ocean river of which the Gulf Stream forms a part, rounds the Cape of Good Hope, Africa, and is there called the "Torrif Stream." Arriving at Cape St. Roque, South America, it passes along the coast in a Northwesterly course, partly entering the Gulf of Mexico. In its endeavor to find an outlet to the west, it wells up the waters in the Bay of Campeachy 61 ft. 6 in. above the average ocean level by its immense pressure. It forces its way out again through the Straits of Florida, carrying with it the scourings of the ocean, and pursuing its northward course, in endeavoring to pass to the westward, it again wells up 100 ft. high off the Gulf of St. Lawrence. Forced by such irresistible pressure it proceeds in an easterly direction, washing the shores of France, Great Britain

and even Iceland, entering the Arctic regions. Having lost its easterly momentum, it again proceeds in a westerly direction and passes southward through Baffin's Bay and Davis' Straits as the "Arctic Current," washing the Eastern shores of North America, side by side with the Gulf Stream fresh and warm from the tropical regions, the difference in temperature between points in the two streams not over one hundred yards apart being as much as 35 deg. Fahrenheit. The Gulf Stream takes its name from the fact that it proceeds from the Gulf of Mexico, carrying with it the scourings and flotsam of the ocean and depositing its jetsum, previous to its Eastward journey, on the banks of Newfoundland. Now it occurs to me as reasonable that if a water passage ever so small existed on the North of America, the great and powerful force exerted by this river trying to find an outlet to the westward on the North, would pass that way. But no such thing has yet been demonstrated. If a North-west passage existed, it would have been easy enough to have found it, for there would have been no ice to hinder navigation—the warm Gulf Stream would always have melted it.

The westward bound equatorial current is parted at Cape St. Roque, and the Southern part finds a passage around Cape Horn, between it and Trinity Land, where, again, the counter currents compel the cold waters of the Antarctic circle to meet the equatorial current, causing the tempestuous weather. This immense force is caused by the diurnal rotation of the earth, it moving in an Easterly direction at the rate of more than one thousand miles per hour at the equator, (as this globe rotates upon its own axis once in every twenty-four hours and its circumference is more than twenty-four thousand miles.) It might be considered that all the surface would rotate with the same velocity, but it is not so. The firm and solid earth meets the mobile ocean waters and separates them, similarly to a vessel stemming through them, with this difference, however; the waters cannot pass under the land and thereby escape the pressure, there *is* no escape except around the land, therefore the waters of the South Atlantic ocean find a passage to the westward around Cape Horn, the Southern extremity of America, while the Northern portion of the vast equatorial river takes the route already explained. This to me seems positive proof that no water channel exists North of America and therefore is my theory of the non-existence of a North-west passage. Consequently, the journey, when it is made, will have to be made on land which extends southward to the Antarctic circle with only exception enough to produce the needed distributing ocean tides—that where our land is their oceans roll, and vice versa. The law of gravitation, there as here, is in the focus of the material of which the earth is composed, con-

sequently a man's weight would be about the same on the concave as on the convex surface, the centre of gravity being in the globular centre of the mass forming the globe, and, of course, abiding by the law that every particle of matter is attracted towards every other particle according to its density. Therefore, to its mass centre—not towards its geometric centre—the earth attracts with a certain force, which we call gravity or weight, all objects within its influence according to their density, no matter which surface they be upon. Thus, man is not so dense as his size in gold, hence he does not receive so much attraction, but whether he be upon the convex or concave surface of the earth, or be passing from the one to the other, the same unfailing law holds and enables him to maintain his equilibrium. This fact once understood, it will not be difficult for the reader to realize that the atmosphere on the interior of the earth would seek the surface of the land, exactly as on the exterior, increasing in density as it approaches the earth and becoming attenuated towards the centre, where, for a distance, thousands of miles across, there exists a void as absolute as that of the interplanetary spaces.

In a little journal published in this city by Mr. J. H. Parry, I find the following, translated from the *Revue des Deux Monde*, my reasons for giving it herewith being that it contains suggestive material relating to my theory and is the nearest approach to an exposition of the idea that has, until now, been presented to the world:

#### LE TROU DE SYMMES.

"The strange disorder which has reigned during the last few years in the atmospheric conditions of all countries, the changes of climate, the inundations, the terrible storms, as well as the appearance of several comets, has attracted the attention of the savants. A general appeal to the discussion of all these phenomena has led to the examination of several theories now almost forgotten, some of which were treated with contempt at the time of their appearance, after having been the subjects of lively dispute among scientific men, are again to-day replaced upon the tapis.

"Among those theories which have agitated the scientific world during a brief period, and which up to the present time has been considered the most whimsical of all, is one which to-day is adjudged worthy of being more profoundly examined; for in the ideas which sometimes appear the most eccentric are often found the germs of the grandest discoveries.

"The 'theorie de Symmes' and the 'grand bassin de Symmes' has furnished for more than half a century an inexhaustible theme of pleasantry to all those students who have given their earnest at-



tention to the known laws which govern the movement of the globe.

"Symmes, in the year 1824, had the boldness to present himself before Congress at Washington for the purpose of obtaining aid and succor for his project of passing over the barrier of ice which encircles the hitherto known extremity of the globe, into the unknown world which exists beyond.

"Among the greater part of legislative assemblies, generally but little interested in the consideration of scientific subjects, it is not astonishing that the scheme of Symmes was treated as an aberration of a 'savant in delirium,' and for a long time the 'Open Hole of Symmes' had become a popular expression for indicating an audacious fabrication. But behold to-day our savants are disposed to examine this strange theory with more indulgence, and they now begin to talk of the 'Hougate plan,' founded upon the ideas of Symmes in 1824, as being at least possible, although difficult of execution.

"The conviction of the existence of an unknown world to mankind towards the pole was founded according to Symmes upon well attested proofs, similar to those furnished to Christopher Columbus by the fruits and roots thrown by the waves upon the coast of Spain after a storm. Symmes based his evidence upon proofs given, not by inanimate nature, but by nature animate and living, the instinct of animals, which cannot mislead, which cannot be false.

"Now, it appeared certain that an immense migration took place in the Autumn of each year among herds of bisons and reindeer, of white bears and foxes, as also game of all sorts, such as hares and rabbits, which moved in bands from the '*South to the North*,' disappearing above the fields of ice which environ the pole, and reappearing again in the Spring among the Esquimaux, well fed and in good condition; the females accompanied with their young born during this migration, and the males large and fat.

"The question naturally arose among the savants—Where had these animals passed the winter? Where is the mysterious country which has sheltered them?

"The reasoning of Symmes was then clear and natural. If these numberless herds found the road to a climate more mild than these glacial plains that we only know, if they found a means of passing beyond, might it not be possible for mankind to follow them? Symmes' idea was then to organize an expedition to follow, by halting places, the track of these animals, pass the first winter in the degrees 81 and 82 where they might await during a second winter the passage of these herds; that then they follow to one degree farther North, and thus acclimated finish in marching *a' la suite* of these infallible guides by passing over to the pole, and discovering the unknown land which these quadrupeds seek.

"A generation has disappeared since Symmes, with a hardihood and perseverance seldom surpassed, sought to have his theory accepted by l' Academie Francaise, who declared that it could not be regarded as serious, and not even considered worthy of an official report; and now to-day a certain M. Hougate reproduces the idea of this same expedition, to the research of the same scheme which had been the dream of poor Symmes, and submits his project to the consideration of our savants.

"It is fair to say that the subject presents itself as a question of good faith and national perspicacity.

"Commander Nares, charged by the British government with their last Arctic expedition, has formally denied that the temperature grew milder according as he advanced toward the North, while the experiences made by Kane and Hall, American commanders, prove entirely to the contrary. The English Capt. Ross reports equally the encounter of warm winds coming from the North, and Parry recounts in the history of his third voyage, that not only was he soothed by the breezes of springtime but that the temperature became so mild that the heat of the sun caused the pitch to flow out of the seams of his vessel, and that clouds of small flies flew aboard, while the ice became so thawed that it could not be walked over.

"It was not until the return to his native land that Captain Hall became acquainted with the theory of Symmes, and he has always maintained that if he had made it a study before he undertook his voyage he would have certainly pushed his way until he had reached the pole, since he was not more than 600 miles from the place described by Symmes as the commencing point of the New Land, and where should be found the famous polar opening, known by the name of Symmes' Hole, giving entrance to a vast plain at the interior of the globe, lighted and warmed by the refraction of the sun's rays.

"There, are sheltered the herds during the meridional winter; there thrive the flowers and fruits unknown. One there may encounter creatures of form and habits different from ours, and perhaps even a human race contrasting in every point with those which exist upon the surface of the earth. The existence of these two basins at the poles caused (following Symmes) by the planetary nature of the globe, has seized upon the imagination of some scientific men, and if they do not give entire faith to his system, at least they do not laugh at this theory which is now already progressing."

















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